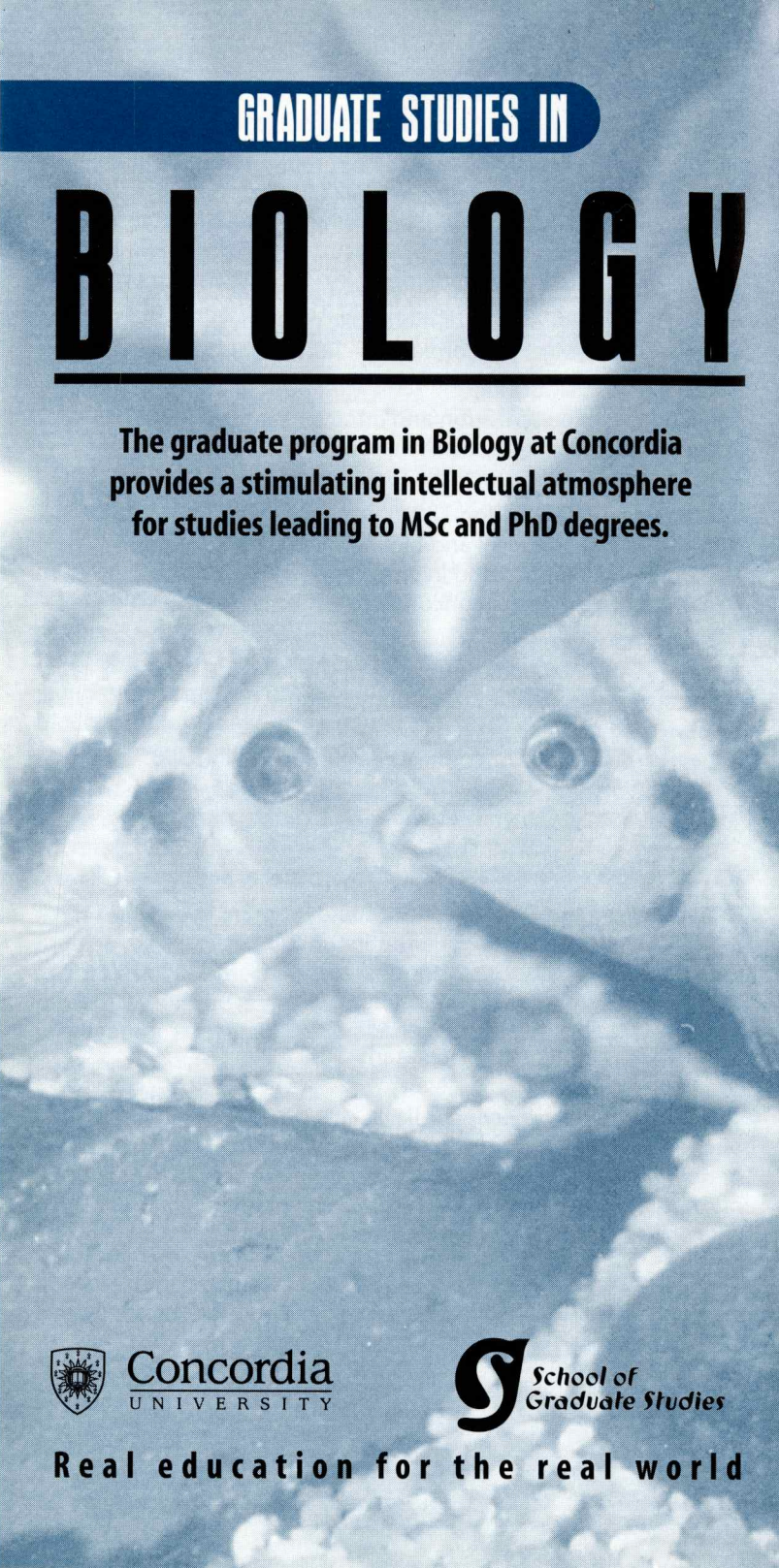
GRADUATE STUDIES IN

BIOLOGY

The graduate program in Biology at Concordia provides a stimulating intellectual atmosphere for studies leading to MSc and PhD degrees.



Concordia UNIVERSITY

School of Graduate Studies

Real education for the real world

ADMISSION REQUIREMENTS Ph.D.

Applicants should have an M.Sc. degree in life sciences, a strong research and academic background (minimum B average).

ADMISSION REQUIREMENTS M.Sc.

The normal admission requirement is a B.Sc. with specialization in Biology (minimum B average) or equivalent. Applicants are encouraged to visit or correspond with faculty members in their areas of interest.

PROCEDURES AND APPLICATION DEADLINE

The most common limiting factor for entry into graduate studies is the availability of research supervisors in the applicants area of interest. Those applicants meeting our entry requirements are strongly encouraged to contact prospective supervisors in advance to enquire about the possibility of graduate studies under their supervision. Applications are considered for September and January admission. Students can consult the departmental website (http://clone.concordia.ca) for details of recent research activity of the faculty.

Applications, including transcripts, reference letters and statement of purpose and research area should be received at the School of Graduate Studies, 2145 Mackay Street, Montreal, Quebec H3G 1M8 by the following dates: **June 1 for Fall (March 31 for International Students) and October 1 for Winter (August 31 for International Students).** Under certain circumstances a student may start studies in Summer. Late applications will be considered if there is still space in the program.

INTERNATIONAL STUDENTS

International Students whose studies are in any language other than English are required to submit, with their application form, a TOEFL score (min. 600). GRE scores (min. 800) are recommended for all International Students.
For any general inquiries related to international admittance, please contact Claudette Fortier, Coordinator, at the International Student's Office: iso@alcor.concordia.ca

FINANCIAL ASSISTANCE

Assistance is available for qualified candidates, on a competitive basis, in the form of teaching assistantships, university scholarships, fellowships research grant stipends and bursaries, that provide a yearly minimum of $12,000. For Scholarships and Fellowships, candidates should write to the School of Graduate Studies for application forms and information. Qualified students are also encouraged to apply for Natural Sciences and Engineering Research Council fellowships and Québec residents for FCAR (Bourses d'études de perfectionnement et de recyclage).

RESEARCH OPPORTUNITIES

ANIMAL BIOLOGY

P. J. Albert, PhD (N.B.),
Structure, function and electrophysiological studies of insect sense organs.
e-mail: albert@alcor.concordia.ca — Tel: (514) 848-8729

N. N. Kapoor, PhD (McMaster),
Electron microscopic studies of cuticular and subcuticular structures of aquatic insects. Osmoregulation, respiration and sensilla in aquatic nymphs.
e-mail: kapoorn@vax2.concordia.ca — Tel: (514) 848-3403

J. D. McLaughlin, PhD (N.B.),
Biology, pathogenesis, systematics and ecology of waterfowl helminths; host-parasite responses of larval helminths and crustaceans.
e-mail: mcljd@vax2.concordia.ca — Tel: (514) 848-3409

S. M. Ruby, PhD (Western Ontario),
Effects of environmental toxicants on reproductive systems; toxicity studies of industrial organic contaminants.
e-mail: sruby@alcor.concordia.ca — Tel: (514) 848-3428

Continued on back →

CELL BIOLOGY/BIOCHEMISTRY

A. M. English, PhD (McGill),
Biological electron transfer mechanisms; structure-function relationships in heme proteins.
e-mail: english@vax2.concordia.ca — Tel: (514) 848-3338

R. Germinario, PhD (N.D.),
Investigations into the hormonal regulation of the replication of human immunodeficiency virus in cultured cells and the regulation of sugar transport metabolism in hormonally responsive target cells.
e-mail: mdrl@musrca.mcgill.ca — Tel: (514) 340-8260

J. Turnbull, PhD (Australia National),
Mechanistic enzymology and structure - function studies of oligomeric proteins.
e-mail: jturn@vax2.concordia.ca — Tel: (514) 848-3389

J. A. Kornblatt, PhD (Cincinnati), Retired.
Biochemical and biophysical studies on the mechanism of energy production of mitochondria. Tel: (514) 848-3404

M. J. Kornblatt, PhD (Cincinnati),
Mechanism and subunit interactions of mammalian enolases.
e-mail: judithk@vax2.concordia.ca — Tel: (514) 848-3384

R. M. Roy, PhD (Toronto),
Modification of physiological and genetic effects of ionizing radiation by tocopherol.
e-mail: royrm@vax2.concordia.ca — Tel: (514) 848-2089/2087

ECOLOGY/BEHAVIOUR

D. Fairbairn, PhD (UBC.),
Evolutionary ecology and genetics, primarily insects.. Field and lab studies of sexual selection, mating strategies, movement patterns and life histories. Quantitative genetic analyses and assessments of fitness.
e-mail: fairbrn@vax2.concordia.ca — Tel: (514) 848-3397

L.-A. Giraldeau, PhD (McGill),
Behavioural ecology of social foraging behaviour, especially in birds. Developing and testing in the lab and field, game-theoretic models of decisions such as food-sharing, foraging group membership, and use of public information.
e-mail: giraluc@vax2.concordia.ca — Tel: (514) 848-3425

J. Grant, PhD (Guelph),
Behavioural ecology of resource defence and mating systems. Ecology of stream-dwelling salmonids.
e-mail: grant@vax2.concordia.ca — Tel: (514) 848-3421

E. Maly, PhD (Princeton),
Zooplankton competition, predation and behaviour; invertebrate and algal population distribution and abundance.
e-mail: malyed@vax2.concordia.ca — Tel: (514) 848-3408

P. Widden, PhD (Calgary),
Microfungal community structure in forest soils. The ecology of vesicular-arbuscular mycorrhizae in forest soils. Microfungi in buildings in relation to "sick building syndrome."
e-mail: widdenp@vax2.concordia.ca — Tel: (514) 848-3413

MICROBIOLOGY/MOLECULAR BIOLOGY

C. G. Cupples, PhD (York),
DNA repair and mutagenesis. Protein structure and function.
e-mail: claire@vax2.concordia.ca — Tel: (514) 848-3427

M. B. Herrington, PhD (McMaster),
Molecular, genetic and biochemical studies metabolism.
e-mail: muriel@vax2.concordia.ca — Tel: (514) 848-3409

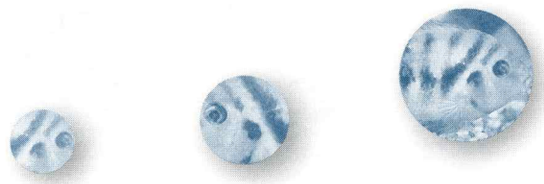
E. B. Newman, PhD (Radcliffe),
The Lrp regulon: molecular aspects of regulation of gene expression in bacteria; microbial metabolism and its regulation; biochemistry of L-serine deaminases.
e-mail: neweb@vax2.concordia.ca — Tel: (514) 848-3410

R. Sheinin, PhD (Toronto),
Viruses which cause cancer. Women in Science Engineering and Technology.
e-mail: sheinin@alcor.concordia.ca — Tel: (514) 848-3385

R. Storms, PhD (AB),
Studies of cell-cycle dependent gene expression in yeast as well as studies of the mechanisms responsible for accumulation of protein within the nucleus and for rapid protein inactivation. e-mail: storms@vax2.concordia.ca — Tel: (514) 848-3412

A. Tsang, PhD (York),
Molecular, biochemical, cellular and genetic approaches to determining mechanisms of developmental control. e-mail: tsang@vax2.concordia.ca — Tel: (514) 848-3405

W. Zerges, Ph.D.(Princeton),
Chloroplast biogenesis, gene espression, and assembly of the photosystem II complex.
e-mail: zerges@alcor.concordia.ca — Tel: (514) 848-3416



PLANT BIOCHEMISTRY AND BIOTECHNOLOGY

P. Gulick, PhD (California),
Isolation and characterization of genes related to salt tolerance and to disease resistance in plants.
e-mail: pgulick@alcor.concordia.ca — Tel: (514) 848-3407

R. K. Ibrahim, PhD (McGill), Professor Emeritus
Biochemistry and molecular biology of plant secondary metabolism; modification of metabolic pathways.
e-mail: ragibra@vax2.concordia.ca — Tel: (514) 848-3399

P. Joyce, PhD (Dalhousie),
Purification, characterization and intracellular targeting of enzymes responsible for tRNA maturation in plants.
e-mail: joycep@vax2.concordia.ca — Tel: (514) 848-3351

B. S. Mangat, PhD (London, UK),
Nutritional, physiological and biochemical aspects of plant cell and tissue cultures and in vitro propogation of plants.
e-mail: mangatbs@alcor.concordia.ca — Tel: (514) 848-3406

L. Varin, PhD (Concordia),
Molecular and biochemical studies of the function of sulfotransferases in plant development, growth and resistance to stress.
e-mail: varinl@clone.concordia.ca — Tel: (514) 848-3396

For further information and application forms, please contact the:

Graduate Program Director or Graduate Program Secretary
Biology Department H-1260
Concordia University
1455 de Maisonneuve Blvd. West
Montreal, Quebec H3G 1M8 Canada
Tel.: (514) 848-3425 / (514) 848-3401
Fax: (514) 848-2881
e-mail: biolgrad@vax2.concordia.ca
or check our website: http://clone.concordia.ca
or download the application directly from the School of Graduate Studies Website: http://www-gradstudies.concordia.ca/SGS_www/GradStudiesHome.html